Listing of the Claims:

1. (Currently Amended) A device for infusion therapy comprising:

a balloon catheter;

a guide wire ~~to be inserted into a guide lumen of the balloon catheter~~;

pulsation detection means for detecting pulsation of the heart; and

stroke means for causing said guide wire to stroke in synchronization with the pulsation of the heart based on a detection signal of the pulsation detection means,

wherein said balloon catheter is a balloon catheter for insertion into a blood vessel in which a plurality of lumens extending along an axis are formed in one catheter body, and two expandable balloons expanding in a direction perpendicular to the axis of the catheter body are arranged axially in series, and the balloon catheter previously combined with the guide wire is inserted into the blood vessel and when inserted are adjusted so that a blood vessel area surrounding the lesion is placed between the two balloons, and wherein said plurality of lumens comprises:

an infusion lumen that has an infusion hole communicating with an outside of the catheter body between said two balloons, and can supply drugs, cells, a treatment instrument, or the like to the outside of the catheter body through said infusion hole;

balloon lumens that communicate with insides of said two balloons to control expansion of said balloons; ~~and~~

a guide lumen into which the guide wire is inserted; and

a bypass lumen that communicates with the outside of the catheter body with bypass holes in both a position distal the two balloons and proximal a tip of the catheter, which is on each side of said two balloons, and bypasses an occluded area formed by the two balloons to allow blood flow, wherein the bypass lumen is ~~formed from~~ the guide lumen ~~into which the guide wire that guides the catheter body to a target position is inserted~~ with the guide wire partially removed from the guide lumen to a position distal the bypass holes, allowing the bypass lumen to work with the stroke means to bypass an occluded area formed by the two balloons.

2. (Previously Presented) A device for infusion therapy according to claim 1, wherein one balloon lumen communicates with the insides of one of said two balloons to individually control expansion of said balloons.

3. (Cancelled).

4. (Previously Presented) A device for infusion therapy according to claim 1, wherein said device is a catheter for insertion into a coronary vein.

5. (Cancelled).